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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/525,502	02/23/2005	Hiroshi Mimura	1009682-000144	7858

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BUCHANAN, INGERSOLL & ROONEY PC
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EXAMINER

REYNOLDS, STEVEN ALAN

ART UNIT	PAPER NUMBER
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3728

NOTIFICATION DATE	DELIVERY MODE
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03/17/2010

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

ADIPFDD@bipc.com
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Office Action Summary	Application No. 10/525,502	Applicant(s) MIMURA ET AL.	
	Examiner Steven Reynolds	Art Unit 3728	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 February 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 8,10,11,13-15 and 17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 8,10,11,13,15 and 17 is/are allowed.
- 6) ☒ Claim(s) 14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 2/26/2010 has been entered. Claims 8 and 14 were amended, and claim 16 was canceled. Claims 8, 10, 11, 13-15 and 17 are pending.

Claim Rejections - 35 USC § 103

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
3. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wu et al. (US 6,732,877) in view of Yamamoto (US 5,960,960) and Bores et al. (US 6,267,245). Wu discloses a substrate storage container including: a container body (8) of a front-opening box for storing substrates therein; a door (82) for opening and closing the front of the container body, wherein the door has front grooves (See Fig. 1) at the interior side of the door for supporting substrates; and an inner-pressure adjustment device (air vent plug arrangement – See Fig. 2) attached to, at least, one of the container body and the door, for adjusting the pressure inside the container body closed with the door. Wu

Art Unit: 3728

discloses the claimed invention except is silent about the specifics of the shelf elements on the interior sides of the container body, the specifics of the interior backside of the container, and the horizontally-placed substrates being lifted up from a shelf element and held by a rear and front groove when the door is closed.

Regarding the specifics of the shelf elements on the interior sides of the container body, Yamamoto teaches a substrate storage container comprising shelf elements which include a part of the substrate contact area of each shelf element that is formed with a low-frictional resistance portion (203 – See column 3, lines 5-9) for the purpose of allowing the substrate to be easily removed from the shelf elements. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have provided the shelf elements of Wu to include a low-frictional resistance portion as taught by Yamamoto in order to allow the substrates to slide into the shelf elements smoothly and to be removed more easily.

Regarding the specifics of the interior backside of the container and the horizontally-placed substrates being lifted up from a shelf element and held by a rear and front groove when the door is closed, Bores teaches a substrate container comprising a door (20) with a plurality of front grooves (grooves in cushion 40) at the interior side of the door; a backside (at 108 – See Fig. 9) which includes grooves (grooves in cushion 120) with a sectional shape configured to be asymmetrical (due to the soft resilient nature of the cushion, deformation of the grooves will occur - See column 7, lines 48-59) with respect to the substrate; and wherein a horizontally-placed substrate is lifted from shelf elements (106) and held by a rear groove and front groove

Art Unit: 3728

when the door is closed (See Fig. 10B; column 3 line 55-column 4 line 4; and column 7 lines 47-59) for the purpose of more securely holding the substrates in place. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the interior of the door and the backside of the container body of Wu-Yamamoto with grooves that lift the substrates when the door is closed as taught by Bores in order to more securely hold the substrates in place within the container.

Wu-Yamamoto-Bores discloses the claimed invention except is silent the specifics of the low-frictional resistance portion of the shelf elements. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have made the low-frictional resistance portions from a material having any roughness including 0.2a or above in order to allow the substrates to be smoothly inserted/removed. It has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 125 USPQ 416.

Wu-Yamamoto-Bores discloses the general conditions of the claimed invention except for the express disclosure of the specific frictional resistance. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have made the low-frictional resistance portions from a material that would have a frictional resistance within the range of 0.15 N to 0.25 N, since the claimed values are merely an optimum or workable range. It has been held that where the general

Art Unit: 3728

conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233.

Allowable Subject Matter

4. Claims 8, 10, 11, 13, 15 and 17 are allowed.

Response to Arguments

5. Applicant's arguments with respect to claim 14 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven Reynolds whose telephone number is (571)272-9959. The examiner can normally be reached on Monday-Friday 9:30am - 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mickey Yu can be reached on (571)272-4562. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3728

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Steven Reynolds/
Examiner, Art Unit 3728